THE AMENDMENTS

In the Claims:

1-10. (Cancelled)

11. (Currently Amended) A method of gene therapy in a heart muscle tissue of a patient, comprising delivering to the heart muscle tissue of a patient an AAV-2 vector or an AAV particle having a capsid encoded by the AAV-2 vector, wherein the AAV-2 vector carries mutations in a heparin-binding motif of a capsid protein and causes a reduced or eliminated heparin binding function, wherein said mutations are R484E and R585E, wherein amino acids R484 and R585 belong to different capsid protein subunits.

12-15. (Cancelled)

16. (Previously Presented) The method of claim 11, wherein the capsid protein is VP1, VP2, or VP3.

17. (Previously Presented) The method of Claim 16, wherein the capsid protein is VP1.

18. (Previously Presented) The method of Claim 11, wherein the amino acid position is numbered according to the numbering based on VP1 protein.

19. (Cancelled)

20. (Previously Presented) The method of claim 11, wherein said delivering is systemic delivering.